

# IRON SHIPS.

No. 112 Survey held at Newcastle Date 17th November 1869 to 18th August 1870  
 in the Iron-hulled Steamer "Neptune" Master J. Janat  
 Tonnage under tonnage deck 191.72 Built at Newcastle When built 1870 Launched 4th May  
 Ditto of quarter deck 14.42 By whom built W. B. Horsley Owners W. & A. Bell  
 Ditto of poop, forecabin, or other erections on upper deck 66.92 Part belonging to Shields Destined Voyage Hull  
 Ditto of spar deck 198.02 If Surveyed while Building, Afloat, or in Dry Dock while building  
 Gross tonnage, less 131.10  
 Register tonnage, 11.12

Feet.	Inches.	Feet.	Inches.	Feet.	Inches.	Horse.	No. of Decks
120	0	20	0	11	11	50	one
Dimensions of Ship per Register, length <u>124</u> breadth <u>20</u> depth <u>11.9</u>							
Keel, $\frac{1}{2}$ bar iron, depth and thickness	Inches in Ship. <u>6 x 1 1/2</u>		Inches required per Rule. <u>6 x 1 1/2</u>		Plates in Garboard Strakes, breadth and thickness		
" if plate iron, breadth and thickness	6 x 1 1/2		6 x 1 1/2		Ditto from Garboard to upper part of Bilges		
Keelson, $\frac{1}{2}$ bar iron, moulding and thickness	6 x 1 1/2		6 x 1 1/2		" from upper part of Bilge to a perpendicular height from upper side of Keel of 3/4ths the entire depth of Hold		
" if plate iron, breadth and thickness	6 x 3		6 x 3		" from 3/4ths depth of Hold to lower edge of Sheerstrake		
Keelson-post, $\frac{1}{2}$ bar iron, moulding and thickness	21		21		" Sheerstrake, breadth and thickness		
" if plate iron, breadth and thickness	21		21		Butt Straps to outside plating, breadth and thickness		
Distance of Frames from moulding edge to moulding edge, all fore and aft	Inches. In Ship. <u>2 1/2</u>		Inches. In Ship. <u>2 1/2</u>		Gunwale Plate or Stringer on ends of Upper Deck Beams, breadth and thickness		
Frames, Size of Angle Iron, single or double	2 1/2 x 2 1/2		2 1/2 x 2 1/2		Angle Iron on ditto		
" Reversed Iron, $\frac{1}{2}$ to every frame	2 1/2 x 2 1/2		2 1/2 x 2 1/2		Stringer or Tie Plates fore and aft, on Upper Deck Beams, outside Hatchways		
" or every frame	2 1/2 x 2 1/2		2 1/2 x 2 1/2		Diagonal Tie Plates on ditto		
Floors, depth and thickness of Floor Plate at mid line	13 x 5		13 x 5		Planksheer, materials and scantlings		
" Ditto ditto at Bilge Keelson	13 x 5		13 x 5		Waterway ditto ditto		
" Size of Reversed Angle Iron, and No. <u>one</u> at top of Floor Plate	2 1/2 x 2 1/2		2 1/2 x 2 1/2		Flat of Upper Deck, thickness and material		
Beams, Deck (No. <u>34</u> ) double Angle Iron, Plate, Tee, or Bulb Iron	5 1/2 x 5		5 1/2 x 5		" how fastened to Beams		
" double or single Angle Iron, on top edge	2 1/2 x 2 1/2		2 1/2 x 2 1/2		Ceiling between Decks and in Hold, thickness and material		
" average space between	on alternate frames		on alternate frames		Clamps or Spirketting ditto		
" Hold, or Lower Deck (No. )	none		none		Stringer Plates on ends of Hold or Lower Deck Beams, breadth and thickness		
" double Angle, Tee, Plate, or Bulb Iron	none		none		Stringer or Tie Plates fore and aft outside Hatchways, on Hold or Lower Deck Beams		
" double or single Angle Iron on edge	none		none		Stringers in Hold <u>double angle iron</u>		
" average space between	none		none		Flat of Lower Deck, thickness and material		
" Paddle, sided and moulded, thickness of Plate size of Angle Iron	16 x 5		16 x 5		Main piece of Rudder, diameter at head		
" Engine " " " "	5 1/2 x 5		5 1/2 x 5		" " " at heel		
Keelson, single or double plate, box, or intercostal	3 x 3		3 x 3		(Can the Rudder be unshipped afloat <u>yes</u> )		
" Size of Plates <u>Bulb Iron</u>	3 x 3		3 x 3		Bulkheads, No. <u>4</u> Thickness of <u>4/16</u>		
" Size of Angle Irons	3 x 3		3 x 3		" Height up <u>upper deck</u>		
" Side, single or double, plate, box, or intercostal	3 x 3		3 x 3		" how secured to the sides of the ship <u>by double frames</u>		
" Bilge (No. <u>one</u> ) at each Bilge, single, or double, plate, or box	3 x 3		3 x 3		" size of vertical angle irons <u>2 1/4 x 2 1/4 x 5/16</u> and their distance apart <u>30"</u>		

Frames extend in one length from keel to gunwale rivetted through plates with 5/8 in. rivets, about 2 1/4 apart.  
 The reverse angle irons on the floors extend in one length across the middle line from bilge to bilge and 2  
 " " " on the frames " " " from keel to gunwale alternately  
 Keelson, how are the various lengths of plates or angle irons connected? by double rivetted butt straps  
 Plates, Garboard, double or rivetted to keel, double or at upper edge, with rivets (7/8 ins.) diameter, averaging (3/4 in.) apart.  
 " Edges from Garboards to upper part of bilge, worked clencher, double or single rivetted; with rivets (5/8 in.) diameter, averaging (2 1/4 ins.) apart.  
 " Butts from Keel to turn of bilge, worked carvel with butt straps (6 x 4) thick, double or single rivetted; with rivets (5/8 in.) diameter, averaging (2 1/4 ins.) apart. Do the butt straps lap over and rivet through the lands of the strake below? no  
 " Edges from bilge to sheerstrake, worked carvel with a lining piece ( ) thick, or clencher, double or single rivetted; with rivets (5/8 in.) diameter, averaging (2 1/4 in.) apart. Do the butt straps lap over and rivet through the lands of the strake below? no  
 " Edges of Sheerstrake, double or single rivetted? At upper edge single At lower edge double  
 " Butts from bilge to planksheers, worked carvel with butt straps (5 x 6) thick, double or single rivetted; with rivets (5/8 in.) diameter, averaging (2 1/4 ins.) apart. Breadth of laps in double rivetting (3 1/2) Breadth of laps in single rivetting (2 1/8)  
 Butt Straps of Keelsons, Stringer and Tie Plates, double or single rivetted? double rivetted  
 Planksheer, how secured to the plating of the sides { Explain by sketch } Cutter  
 Waterway " " planksheer and to the Beams { if necessary. }  
 Deck Beams, how secured to the side? by welded knees rivetted to frames  
 Hold or Lower Deck ditto none  
 Paddle " " none No. of breasthooks 3 crutches 3  
 What description of Iron is used for the Frames, Beams, Keelsons, Tie and Stringer Plates, Outside Plating, &c.? Palmer & Co's  
 Manufacturer's name or trade mark Palmer & Co's

We certify that the above is a correct description of the several particulars therein given.

Builder's Signature

Surveyor's Signature

IRON 446-C442

Lloyd's Register  
Foundation



Workmanship. Are the lands or laps of the clenchwork in all cases in breadth at least five and a half times the diameter of the rivets in double rivetted edges and butts, and at least three and a quarter times the diameter of the rivets where single rivetting is admitted? yes  
Do the edges of the carvel work and of the batts lay close together throughout their length without requiring any making good of deficiencies? yes  
Do the fillings between the ribs and plates fill in solid with single pieces? or are they in short lengths of various thicknesses? solid single piece  
Do the holes for rivetting plate to frames, butt straps, or plate to plate, &c., conform well to each other? fairly and are the rivet holes well and sufficiently countersunk in the outer plate? yes  
Are there any rivets which either break into or have been put through the seams or butts of the plating? a few

Her Masts, Bowsprit, Yards, &c., are in good condition, and sufficient in size and length. (If they are of Iron or Steel give the Scantlings of Plating, Angle Irons, &c., and further explain by a Sketch showing how the lower Masts and Bowsprit are constructed, showing the number of Plates and Angle Irons, mode of rivetting, quality of Materials, and if stamped with Maker's name.

81982m

Tested at Lloyd's Type P. H. signed R. B. Russell Sept

N <sup>o</sup> .	She has SAILS.	CABLES, &c.	Fathoms.	Inches.	Test as per Certificate.	In. req'd per Rule.	Test req'd per Rule.	ANCHORS, &c	N <sup>o</sup> .	Weight. Ex. Stock.	Test as per Certificate.	W'ght req'd per Rule.	Test req'd per Rule.
	Fore Sails,	Chain .....	180	7/8	13.15.0.0	14	13 3/4	Bowers .....	2	5.1.9	14.0.7	5.1.0	7 1/2
	Fore Top Sails,	<u>Long</u>								5.1.0	7.11.3.14	5.1.0	7 1/2
	Fore Topmast Stay Sails	<u>Hemp</u> Stream Cable	45	10/16		9/16							
	Main Sails,	Hawser .....	40	6		6		Stream .....	1	2.1.8		2.0.0	
	Main Top Sails,	Towlines .....	40	4		4							
		Warp .....	120	3				Kedges .....	1	1.1.0		1.0.0	
		All of <u>good</u> quality.											

Her Standing and Running Rigging hemp sufficient in size and good in quality.

She has one life Long Boat and one other

The present state of the Windlass is good Capstan good and Rudder good Pumps good & sufficient

Order for Special Survey DATES of 1st. On the several parts of the frame, when in place, and before the plating was wrought } built  
No. 727 Surveys held 2nd. On the plating during the progress of rivetting } under  
Date 15 Nov 1869 while building 3rd. When the beams were in and fastened, and before the decks were laid } special  
Order for Ordinary Survey as per 4th. When the ship was complete, and before the plating was finally coated } survey  
No. — 5th. After the ship was launched  
Date — Section 18.

State if she has a Spar Deck no Poop no or Forecastle no

General Remarks, This vessel is built in accordance with the Section attached, and the Secretary's letter of 1<sup>st</sup> December 1869 - that is in accordance with the Rules for the B-grade.

In what manner are the surfaces preserved from oxidation? Inside by Portland Cement & paint.  
Ditto ditto Outside by paint & composition.

I am of opinion this Vessel should be Classed B I

The amount of the Fee .....£ 2 : .. is received by me,

Special .....£ 9 : 10 :  
Certificate (if required) .....£ .. : ..

Committee's Minute 23<sup>rd</sup> August 1870.

Character assigned B I

Committee's Minute 21<sup>st</sup> October 1870  
Character assigned B I  
This vessel appears to be in the Class B I & is recommended for that Class.  
R. B. Russell  
Registered Foundation

4. In the W. B. Standard, Standard Builders, Wellington, New Zealand on page 4.